WHAT I KNOW ABOUT CHEMISTRY

Chemistry is a science. Its main task is to find out what everything is made of.

At first it seemed everything was made out of dirt, water, air, and fire, or some combination of these. The combination was important right from the start, as if the secret of the universe was in a safe, and chemists were burglars.

But soon people found ways to divide up dirt and air and water into many other things. In dirt, for example, there were rocks, sand, ashes, manure, and animalcules. Fire couldn't be cut up so easily, and was too hot to study closely, but somebody discovered that if you used it to cook some things they would change into other things. The Frenchman Lavoisier (Lav-whaz-ee-ay) found out that fire just happened when part of the air "combined" with a "substance" (I shall define this term later). He turned quicksilver into red dust that way. Fortunately, he also turned the red dust back into quicksilver. Then he got his head chopped off by the angry Jacobins, who were butchers and bakers and clerks, and people like that, who didn't have much use for chemistry.

Then many more important discoveries were made, and it seemed as if there were dozens and dozens of "substances," a word meaning "standing under," as when a bunch of muscular slaves carry one of those silk-canopied boxes in which is a beautiful queen with a jewel in her nose and a filmy costume. Everybody watches her and ignores the slaves, forgetting that they, the stalwart standers-under, really keep the whole show going.

At any rate, with all these substances, burglar chemists were hitting combinations by the tens of thousands, each one a jackpot, or "swag" of fantastic riches. George Washington Carver, a famous black man, in fact the only famous black man before Martin Luther King, as far as most people are concerned, showed how you could make shoes and flashlights and pianos and such things out of peanut shells. That made the peanut the piano's slave, in one sense, but in another way the piano is nothing but a hot peanut singing.

Also, about this same time, the Germans put a lot of stinking things together and made phosgene gas, which was used in World War I to suffocate the French soldiers. Somehow the Germans always seem to have chemists who come up with a rocket or a lampshade or a secret gas that will make you change your mind even if you don't want to, especially if you are Jewish. Nevertheless, many people say the Germans are fabulous chemists.

This is not all I know about chemistry. There are all the formulas, like H_2O and NaCl and FeO_2. These are abbreviated recipies showing, for example, that two parts of hydrogen and one of oxygen can be folded together to make water. Sometimes the abbreviations are confusing and misleading, as "Na" which is Sodium, quite a positive element, really, or "Sn", which is Tin, though there is nothing snide or sneering or snotty about it, as far as I can see. With only ninety-two "elements," as they are called, it is possible to make millions, I think, of compounds. And now chemists have even made some new elements by certain atomic tricks, which brings us to the final chapter of what I know about chemistry.

As we noted in the beginning, there was always something odd about fire. It didn't quite fit in with the others, though it certainly influenced them. Lavoisier figured out that it was a sign of transformation, like a cheer going up from the barricades. However, as we said, he was not popular.

After many clever experiments, Madame Curie (a famous woman scientist and about the only famous woman scientist we ever had, whose unfortunate husband was run over by a milk wagon) and Albert Einstein, who played the violin and liked ice cream, apparently in spite of the milk wagon, and Lord Rutherford, a burly Englishman, together proved that atoms, which were supposed to be hard little buttons, were not that at all. At first chemists decided that there was a little button in the middle with teeny, teeny buttons whirling around it, much as, all the textbooks go on, the planets travel around the sun. However, these teeny buttons often behaved crazily. They would go in and out like yo-yos, or fall off the center button altogether and bounce around, switch places, and so on. Perhaps you are wondering what all this has to do with fire. Be patient.

Anyway, the buttons were so zany that a man named Heisenberg, one of the famous German chemists, announced a very important law, which said that you could never know much of anything about the buttons, because the more you tried to find out, the less you really knew. This was depressing.

Nevertheless some other famous people, like Oppenheimer, who read about Buddha and wasn't very patriotic, found out that some of the little center buttons could be broken apart. These were called push-buttons. When that happened fragments of the button vanished and there was a tremendous hot flash of light, like something huge burning up very fast. The American army gathered Uranium, which had the best buttons for coming apart, and made a bomb to drop on the Japanese. The bomb evaporated a lot of Japanese, except for their shadows printed on the sidewalk. These

push-button shadows are very interesting to tourists.

Thus it was proven that the little buttons could turn into heat, light, and shadows, just like fire, only more so. Of course, the heat cools off eventually; the light shoots away at a fantastic speed, and then nothing is left but the shadows. This is gradually happening to everything, according to famous men nowadays. They say after a long time there won't be anything left but shadows.

This is something to think about in chemistry.

-- Will Baker

Berkeley CA

parnell
street
they play
street hockey
shaking
their
long
black hair

"thorobred
racing
every day"
pick
a doozee
have lunch
in a
glass room

simile
cold as the
clams on the
plimouth shore

directions
yellow
yellow
yellow
mix with
a
tin fork

the cupboard
was bare
grant witches
amnesty

death on a bus
gold teeth
& rings
of lapis
lazuli
one
gigantic
kiss

sun
globe
of fire
warming
mice

smallest one
brown hair
brown eyes
stole a
paste diamond
pin
once